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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,530	01/16/2001	Mireille Maubru	05725.0828-00	2122

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EXAMINER	
WANG, SHENGJUN	
ART UNIT	PAPER NUMBER
1617	

MAIL DATE	DELIVERY MODE
08/04/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/759,530	MAUBRU ET AL.	
	Examiner	Art Unit	
	Shengjun Wang	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 May 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10,12-18,23-34 and 37-44* is/are pending in the application.

4a) Of the above claim(s) *13,15,23-29 and 37-44* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,12,14,16-18,30-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 18, 2009 has been entered.

Claim Rejections 35 U.S.C. 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-10, 12, 14, 16-18 and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray (US 5,720,964, of record), in view of Sweger et al. (US 5,482,704, of record), Babenko (US 6,277,893) and Saint-Leger (US 5,919,438, of record), and in further view of Harashima (EP 0268 982).

Murray teaches a conditioning shampoo composition (Murray, abstract). Murray's composition comprises

- A cosmetically acceptable aqueous medium (water; *id.* at 1: 49),
- anionic surfactant (such as sodium laury ether sulfate) and optionally nonionic or amphoteric surfactants *(id.* at 1: 48, 4: 66-67, 5:22-24),

- a cationic polymer *(id.* at 1: 57-59) such as polymer JR 400, or Jaguar C17 *(id.* at 4: 25-31), and
- An insoluble silicone obtained from an emulsion polymerized dimethylpolysiloxane microemulsions. Dimethiconol with molecular weight of over 200,000 is preferred, which may be further capped with methyl group (*id.* at 1: 50-56, 5: 55-62; 6: 1-3). It is further preferred that the viscosity of dimithiconol be in the range of 1-20 million cst because high viscosity increases the conditioning effect obtainable from the silicone (id. at 4: 63-65).

Murray discloses exemplary compositions that also contain "Carbopol 980" *(id.* at 6: 7-30, Examples 2 and 3). Murrary also disclosed that employment of other silicone material as hair conditioning agents is well known in the art (id at 1:3-45).

Murray does not teach expressly a composition comprise the amphoteric starches of Formulas I-IV and the other particular ingredients herein and a silicone conditioning agent with viscosity of $1X10^{-5}$ m^2/s to 1 m^2/s (10 cst to 1 million cst).

However, ***Sweger*** teaches hair care compositions comprising the amphoteric starches of Formulas I and II (Sweger, abstract, 1:41-67). Sweger teaches that the amphoteric starches are thickeners and emulsion stabilizers *(id.* at 4: 29-33). ***Sweger*** compares lotion compositions containing an amphoteric starch (CEPA potato starch) with a control containing "thickener (Carbopol)" and secondary emulsifiers *(id.* at 8: 1-10; "Control 2" contained Carbopol 940 and the secondary emulsifiers "Ceteth 20" and "Glyceryl stearate SE"). ***Sweger*** discloses that experimental sample A, which contained amphoteric starch but no Carbopol or secondary emulsifiers, "is actually superior to the Carbopol standard (Control 2)" in maintaining

viscosity of the lotion composition over time *(id.* at 8:48 to 9: 5). Furthermore, ***Sweger et al.*** teach the usefulness of the amphoteric starch herein employed in cosmetic composition. The starch derivatives may be used as thickener or emulsion stabilizer, they provide cosmetic composition with excellent aesthetic properties of skin feel and appearance. See, particularly, col. 1, line 20 to col. 2, line 33. The starch derivatives may be employed in various cosmetic compositions, including skin care creams and lotion, the cosmetic composition may comprise various conventional cosmetic ingredients. The amounts of the starch derivatives employed are depending on the type of cosmetic compositions, but generally in the range of 0.1% to 20%. See, particularly, col. 4, line 39 to col. 6, line 40.

Babenko teaches the same amphoteric starches disclosed by Sweger (Babenko, 1: 60 to 2: 19) as useful in combination with dimethicone copolyol *(id.* at 2: 20-38) as an emulsifier for oil-in-water emulsions *(id.* At 2: 50-58), which are "widely used in cosmetic and dermatol[o]gical compositions or applications, particularly skin, hair and body care compositions" *(id.* at 1: 24-26). ***Babenko*** expressly suggests using the disclosed emulsion in shampoos *(id.* at 5: 20-23). Babenko further teaches particularly a stable oil-in-water emulsion for use in cosmetic composition comprising the starch derivatives herein as emulsifier. The emulsion is particularly useful in compositions such as creams, lotions, antiperspirants, make-up products, sunscreens, shampoos and body cleansing products. See, particularly, the abstract, column 5, lines 20-40. Dimethicone, a polydimethylsiloxane is particularly useful in making the emulsion. See, particularly, col. 6, 10-32.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the claimed invention was made to make a conditioning shampoo according to Murray (e.g., the

Example #2 composition) that comprises all the ingredients of herein claimed composition except for the amphoteric starch and coconut monoisopropanolamide: cosmetically acceptable medium (water), washing base (the anionic surfactant, such as sodium lauryl ether sulphate), cationic polymer (Jaguar C17 or JR 400), and silicone (50% silicone emulsion polymer). (Murray 6: 6-30.)

4. Sweger and Babenko disclose the amphoteric starches of Formulas I and II. Sweger teaches that they are useful as thickeners and emulsifiers in hair care compositions, and Babenko teaches that an oil-in-water emulsion comprising the amphoteric starches and a silicone is useful in shampoos. Finally, Sweger teaches that the amphoteric starches are superior to Carbopol in providing a stable, thickened composition. ***Saint-Leger*** teaches that coconut monoisopropanolamide is particularly useful in shampoo composition, particularly with alkyl ether sulfate. See, particularly, the example 1, in col. 4. Further, none of the primary references require the present of fatty acid soap when amphoteric starch is used.

5. Based on the teachings of the cited references, a person of ordinary skill in the art would have considered it obvious to substitute the amphoteric starch disclosed by Sweger and Babenko for the Carbopol used in Murray's composition, e.g., Example #2 composition, because of the superior performance taught by Sweger. The resulting composition does not contain fatty acid soaps, and meets all the limitations of instant claim 1. The employment of coconut monoisopropanolamide would have been obvious because coconut monoisopropanolamide is an ingredient particularly known to be useful in shampoo composition. As to the newly added amendments, it is noted that the claim as amended recite silicone resins. Interpretated broadly, silicone resins would encompass the silicone gum disclosed by Murray et al. . Further, Murray et

al. disclose that the dimethiconol may be further capped with methyl groups (i.e. with trimethylsilyl end group). Furthermore, the employment of different emulsion polymerized dimethylsilicone, such as those with trimethylsilyl end groups in the composition disclosed by Murray et al. would have been obvious to one of ordinary skill in the art as those emulsion polymerized dimethylsilicone is similarly useful as dimethiconol. See, ***Harashima et al.*** particularly, table 7 at page 10. Further, the employment of a polysiloxane with a viscosity of 1 million cts would have been obvious in view of the prior art because in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). Furthermore, as disclosed by Murray, the employment of polysiloxane with higher viscosity is to increase the conditioning effect obtainable from the silicone. In other word, polysiloxane with lower viscosity is also known as hair conditioning agents but with a lower conditioning effect. Therefore, the employment of the polysiloxane with lower viscosity would have been obvious as it is well-settled that disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994).

Response to the Arguments

Applicants' amendments and remarks submitted May 18, 2009 have been fully considered, but are not persuasive.

6. Applicants contend that since Murray teach a preferred viscosity of 1-20 million cst for polysiloxane, it would have not been obvious to employ a polysiloxane with viscosity of 100 to 1,000,000 cst. The arguments are not probative for reasons discussed above, particularly, the employment of a polysiloxane with a viscosity of 1 million cts would have been obvious in view of the prior art because in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). Furthermore, as disclosed by Murray, the employment of polysiloxane with higher viscosity is to increase the conditioning effect obtainable from the silicone. In other word, polysiloxane with lower viscosity is also known as hair conditioning agents but with a lower conditioning effect. Therefore, the employment of the polysiloxane with lower viscosity would have been obvious as it is well-settled that disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shengjun Wang whose telephone number is (571) 272-0632. The examiner can normally be reached on Monday to Friday from 7:00 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Shengjun Wang/
Primary Examiner, Art Unit 1617

7.